**CLAIMS**:

1. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer having a varied concentration of barium and strontium within the layer, comprising:

positioning a substrate within a chemical vapor deposition reactor;

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing at least one oxidizer to the reactor, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate; the barium and strontium being provided within the reactor during all of the deposit of said layer at a substantially constant atomic ratio of barium to strontium; and

during said deposit, changing a rate of flow of the oxidizer to the reactor at least once to effect a change in relative atomic concentration of barium and strontium within the deposited barium strontium titanate comprising dielectric layer.

2. The method of claim 1 comprising changing the rate of flow at least twice.

3. The method of claim 1 comprising providing the barium and strontium within the reactor by flowing at least two metal organic precursors to the reactor, one of the precursors comprising barium, another of the precursors comprising strontium.

4. The method of claim 1 comprising providing the barium and strontium within the reactor by flowing at least two metal organic precursors to the reactor, one of the precursors comprising barium, another of the precursors comprising strontium, the one and the another precursors being fed to the reactor as a mixture in a single flow stream.

5. The method of claim 1 comprising providing the barium and strontium within the reactor during all of the deposit of said layer at substantially constant volumetric flow rates to the reactor.

6. The method of claim 1 wherein the oxidizer is inorganic.

7. The method of claim 1 wherein the oxidizer comprises $NO_x$, where "x" is at least 1.

8. The method of claim 1 wherein the oxidizer comprises NO.

9. The method of claim 1 wherein the oxidizer comprises a single inorganic oxidizer consisting essentially of NO.

10. The method of claim 1 comprising flowing at least two oxidizers to the reactor.

11. The method of claim 1 comprising flowing at least two inorganic oxidizers to the reactor.

12. The method of claim 1 comprising flowing at least two inorganic oxidizers to the reactor, said oxidizers comprising at least $O_3$ and $N_2O$.

13. The method of claim 1 comprising flowing at least two inorganic oxidizers to the reactor, said oxidizers comprising at least $O_3$ and $NO_x$, where "x" is at least 1.

14. The method of claim 1 comprising flowing at least two inorganic oxidizers to the reactor, said oxidizers comprising at least $O_2$ and $NO_x$.

15. The method of claim 1 comprising flowing at least two inorganic oxidizers to the reactor, said oxidizers comprising at least $O_2$ and $N_2O$.

16. The method of claim 1 comprising flowing at least two inorganic oxidizers to the reactor, said oxidizers comprising at least $N_2O$ and $NO_x$, where "x" is at least 1.

17. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer having a varied concentration of titanium within the layer, comprising:

positioning a substrate within a chemical vapor deposition reactor;

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing at least one oxidizer to the reactor, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate; the barium and strontium being provided within the reactor during all of the deposit of said layer at a substantially constant atomic ratio of barium to strontium; and

during said deposit, changing a rate of flow of the oxidizer to the reactor at least once to effect a change in atomic concentration of titanium within the deposited barium strontium titanate comprising dielectric layer.

18. The method of claim 17 wherein the changing of a rate of flow of the oxidizer to the reactor at least once is also effective to effect a change in relative atomic concentration of barium and strontium within the deposited barium strontium titanate comprising dielectric layer.

19. The method of claim 17 comprising changing the rate of flow at least twice.

20. The method of claim 17 wherein the oxidizer is inorganic.

21. The method of claim 17 wherein the oxidizer comprises $NO_x$, where "x" is at least 1.

22. The method of claim 17 wherein the oxidizer comprises NO.

23. The method of claim 17 wherein the oxidizer comprises a single inorganic oxidizer consisting essentially of NO.

24. The method of claim 17 comprising flowing at least two oxidizers to the reactor.

25. The method of claim 17 comprising flowing at least two inorganic oxidizers to the reactor.

26. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer, comprising:

positioning a substrate within a chemical vapor deposition reactor; and

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing oxidizers comprising at least $O_3$ and $N_2O$ to the reactor, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate; the $O_3$ being present within the reactor during at least a portion of the deposit at greater than 10% by volume of the total volume of $N_2O$ and $O_3$ within the reactor.

27. The method of claim 26 wherein the portion comprises a majority portion.

28. The method of claim 26 wherein the portion comprises all of the deposit.

29. The method of claim 26 wherein the conditions are void of plasma and remote plasma.

30. The method of claim 26 wherein the conditions comprise at least one of plasma or remote plasma.

31. The method of claim 26 comprising flowing another inorganic oxidizer to the reactor during the deposit.

32. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer, comprising:

positioning a substrate within a chemical vapor deposition reactor; and

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing oxidizers comprising at least $O_3$ and $NO_x$ to the reactor, where "x" is at least 1, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate.

33. The method of claim 32 wherein "x" equals 1.

34. The method of claim 32 wherein "x" is more than 1.

35. The method of claim 32 comprising flowing another inorganic oxidizer to the reactor during the deposit.

36. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer, comprising:

positioning a substrate within a chemical vapor deposition reactor; and

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing oxidizers comprising at least $O_2$ and $NO_x$ to the reactor, where "x" is at least 1, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate.

37. The method of claim 36 wherein "x" equals 1.

38. The method of claim 36 wherein "x" is more than 1.

39. The method of claim 36 comprising flowing another inorganic oxidizer to the reactor during the deposit.

40. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer, comprising:

positioning a substrate within a chemical vapor deposition reactor; and

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing oxidizers comprising at least $N_2O$ and $NO_x$ to the reactor, where "x" is at least 1, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate, the $NO_x$ being present within the reactor during at least a portion of the deposit at greater than 10% by volume of the total volume of $N_2O$ and $NO_x$ within the reactor.

41. The method of claim 40 wherein "x" equals 1.

42. The method of claim 40 wherein "x" is more than 1.

43. The method of claim 40 comprising flowing another inorganic oxidizer to the reactor during the deposit.

44. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer, comprising:

positioning a substrate within a chemical vapor deposition reactor; and

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing oxidizers comprising at least $O_2$, $O_3$ and $NO_x$ to the reactor, where "x" is at least 1, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate.

45. The method of claim 44 wherein "x" equals 1.

46. The method of claim 44 wherein "x" is more than 1.

47. A chemical vapor deposition method of forming a barium strontium titanate comprising dielectric layer, comprising:

positioning a substrate within a chemical vapor deposition reactor; and

providing barium and strontium within the reactor by flowing at least one metal organic precursor to the reactor, and providing titanium within the reactor, and flowing oxidizers comprising at least $O_2$, $O_3$ and $N_2O$ to the reactor, under conditions effective to deposit a barium strontium titanate comprising dielectric layer on the substrate.

48. The method of claim 47 wherein the conditions comprise receipt of the substrate by a susceptor, the susceptor having a temperature of less than or equal to 550°C.

49. The method of claim 47 wherein the deposited layer is substantially homogeneous.

50. The method of claim 47 wherein the deposited layer is not substantially homogeneous.

51. The method of claim 47 comprising flowing another inorganic oxidizer to the reactor during the deposit.